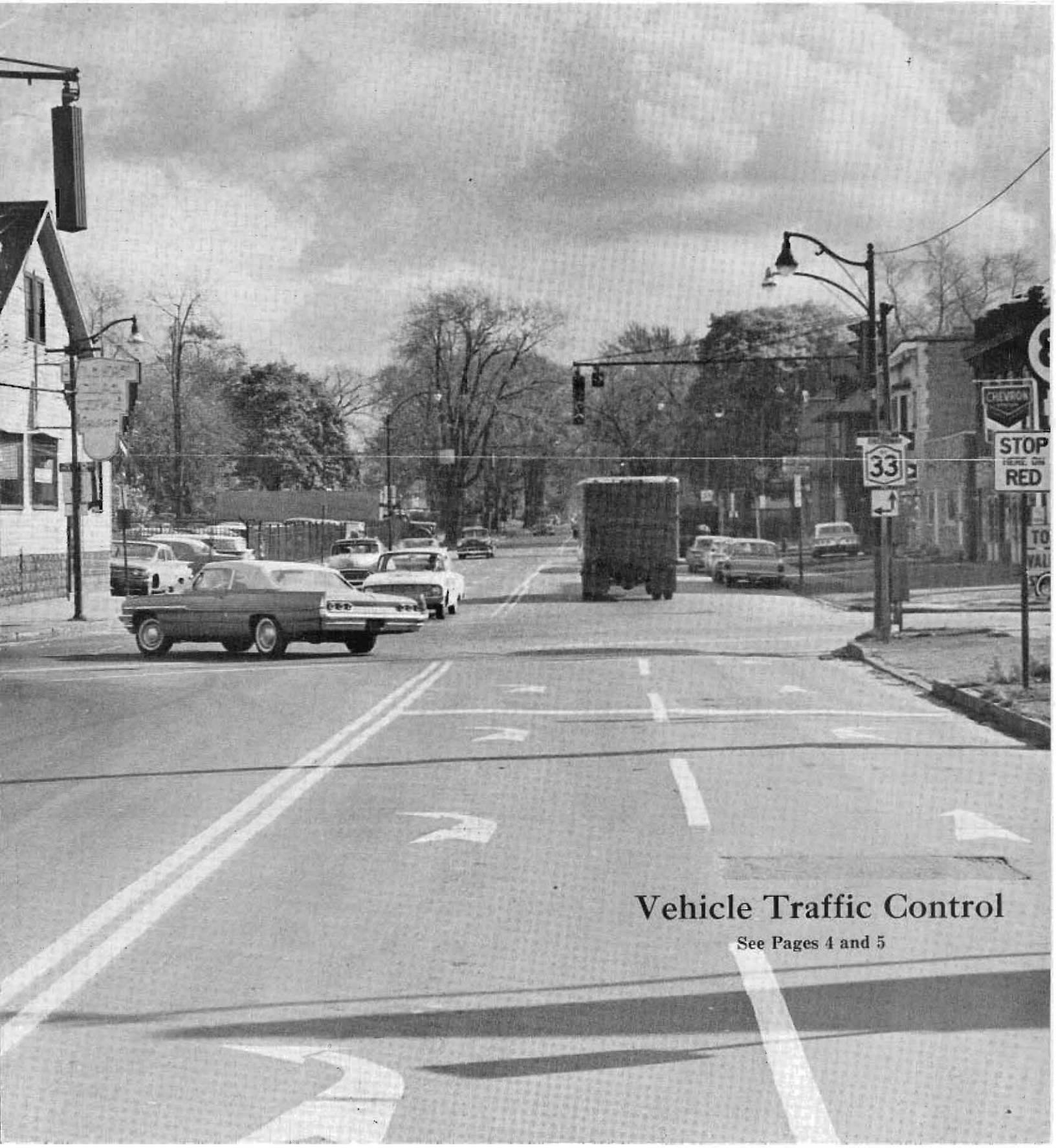
GRS Semaphore

General Railway Signal Company | Rochester 2, New York | October-November 1961



Vehicle Traffic Control

See Pages 4 and 5

GRS Semaphore

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EDITORIAL AND REPORTING STAFF

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F. C. ELECTIONS

The annual elections for officers of the Fellowship club will be held on November 27. In the usual manner the ballots will be distributed to members through the company mail. After the ballots have been marked they should be returned to Ralph DuVall, who is the official teller for the election.

The Fellowship Club is the parent group for the other GRS clubs that exist here. These clubs are: euchre, bowling, table tennis, pistol, shuffle board, art and hobby, orchestra, golf, fishing, model railroad, and baseball. These represent a lot of extra-curricular interests and other clubs may be formed when sufficient interest develops in the particular subject.

General Railway Signal Co. assists in financing the Fellowship Club by an annual contribution of $6,000.

The candidates for 1962 officers of the Fellowship Club are listed and pictured on pages 6 and 7 of this issue.

BOGART ARTICLE IN A. T. JOURNAL

Taxiing and Routing of Aircraft Coordination Equipment is more readily pronounced when abbreviated to TRACE, and that is the name of a GRS system for the control of aircraft on the ground. How TRACE expedites the movement of traffic on runways and taxiways of the airport is described in the October issue of the magazine **Air Traffic Control** by Curtis C. Bogart, Mgr., Aviation Systems Division of GRS.

Curt Bogart has worked for GRS since early 1959. He has a most interesting aviation background. In 1928, he earned his commercial pilot license and was a test pilot at Toronto. Starting in 1933, he logged 4500 hours as a bush pilot in northern Canada working out of Noranda, Quebec. He was head of the Air Traffic Control Division of Canada's Department of Transport from 1939 to 1958 and for a year prior to joining GRS he was Senior Development Engineer of ATC studies at Franklin Institute Laboratories.

Signal Engineer of the San Martin Railways, Buenos Aires, Argentina is Mr. Otto Matic. He was in Rochester earlier this month to examine GRS methods and systems. Our CTC is now being installed on the San Martin. He is shown here in our exhibit room with M. E. Hoff, Com'l. Dept., who first made his acquaintance while in Buenos Aires last year.

GOLFERS END '61

League play for GRS golfers has ended and winners of the various teams have been announced as follows: Bill Robinson and Charlie Dahlberg in "A" Flight, with Hank Lapinski and Dick Jackson taking runner-up honors. Al Ferraro and Lou Paris were first in the Early Flight, with Bill Cuppernell and Jim Martin in the second spot. "B" Flight found Charlie Kalmbach and Don Jamison in the No. 1 position with 301 points. Bill Tarr and Glen Benjamin scored 300½ and Bill Canty and Fred Belmont were 300 points even.

Individual honors in the various flights were taken by Charlie Dahlberg for "A" Flight, with Bob Hagen only one stroke down. Bill Tarr took No. 1 place in "B" Flight and Bill Cuppernell was best man in the Early Flighters. Al Ferraro was one stroke under him.

PING PONG PLAYERS COMPETE

The class A title of the 1961 GRS table tennis round robin was won by Joe Paris last month, who finished first in his division with a record of no defeats.

Other winners were Bob Sagers, who took class B honors, Bob Kesselring, who won the so-called novice title, and the team of Tom Curran and Bob Kesselring finished undefeated to win the high-low doubles title.

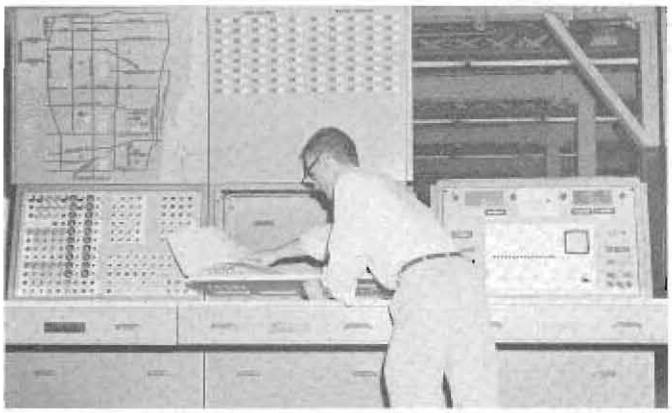
Other important facts were the 1961 Sportsmanship award presented to Dick Jackson, Jr. and the "A" for effort voted to Bev O'Donnell, who was the only woman contestant.

The table tennis club boasts 30 very active members and maintains a year round program of matches and tournaments. The club will participate in five city tournaments during the next eight months.

PISTOL SHOOTERS, AIM!

Momentum is being gained by the GRS Pistol Club which has been in existence now for over a year. Guns used are all .22 calibre. Meetings and firings are held at the James Wadsworth Army Reserve Center at 2035 North Goodman Street at 7:30 P.M. about once a month. Visitors are welcome. Contact Bob Sausyn, president.

WAUKEGAN MACHINE COMPLETED



Waukegan machine, ready for shipment from Genesee Plant, gets final checkout from engineer Jim Coleman.

Waukegan, Illinois, a progressive city of 56,000, has just taken delivery on a new GRS Dispatching machine for their fire and police departments. The equipment resembles the Monroe County-Rochester Master Dispatch System placed in service here last year to coordinate the control of fire fighting equipment in this area, although it is considerably smaller than the Rochester installation.

The Waukegan machine has a large map of the area with illuminated indicators and they display information locating and identifying mobile equipment such as fire trucks and police cars. It also is a Master Dispatch System and like Rochester, one of its important functions is to enable the fire chief to deploy apparatus in such a manner that no area is left unprotected. A large fire requiring much fire equipment may leave nearby areas highly vulnerable in case another fire breaks out. The information concerning the disposition of apparatus will be displayed at the control center and other equipment can be brought in from several areas to provide temporary and partial protection.

Working circuits of the Waukegan machine were fabricated here. Intricate wiring hookups are routine for assemblers like Jessie Dibble, left, and Anna Koroly, at Genesee Plant. Here they are making cable installations for racks and panels such as the Master Dispatch unit described in this article.

The Waukegan job is now being installed. Another job, bigger than Rochester's, has recently been ordered by the city of Baltimore.

SCHOPP NOTES & PERSONALS

WEDDING BELLS

Clyde Calkins, Mills, to Anna Steele, Nov. 3rd at Ogden Presbyterian Church. After their honeymoon trip to Montreal, Canada, they will make their home at 306 Renouf Drive.

Joseph Zaso, Millwright, and Geraldine Mitchell were married Saturday, November 4, 1961, at Bradford, Pennsylvania.

William Langley, Mills, and Marie Turner were wed October 7, 1961 at the Church of the Epiphany.

Ray Gill, Foundry, and his wife Helen celebrated their 25th wedding anniversary recently.

Sincere congratulations to all of you.

WELCOME BACK FROM RECENT ILLNESS

Walt Vleck	Testing
Omar Stowell	Production Control
Bill Gunther	Foundry

Our good friend, Walt "Weinerschnitzel" Lang, Genesee Plant, is recuperating at his home 345 Magnolia Street, Rochester, N. Y. A card to cheer him up would be greatly appreciated.

Auf Wiedersehn, Walt.

STORK VISITS

Al (AC-GP) and Caroline D'Ambra, a baby girl, Lori Ann.

Joe and Eleanor Weiser (Engr.), a baby boy, James Michael.

Mr. and Mrs. Jerry Olsson, on leave of absence in Michigan, have a new daughter.

Jerry (Engr.) and Ruthie O'Shea have a third son, Steven James.

Best Wishes to you all.

ENGAGEMENTS

Miss Ann Burns, Purchasing, became engaged to Jerry Halligan November 10th. They plan to be married June 30, 1962.

G. P. NEWS

Florence Denny, AC Dept., recently returned from a unique tour of Japan. Although she went on a conducted tour, the group with whom she travelled went to many spots that are off the beaten path for most tourists. The group lived with Japanese families, ate Japanese food and visited the less familiar areas of this Pacific island country.

Janet Gommenginer, AC Dept., returned Nov. 6th after a prolonged illness. Her co-workers are all happy to see her looking well again.

Minnie Sherwood, J. Carmen's Office, has also been welcomed back at Genesee after her recent illness.

Marie Wehner, AC Dept., who retired in October was feted Nov. 8th at a party in Melody Lane. Forty of her friends and co-workers greeted Marie with some harmonious community singing accompanied by Dick Streb at the Salovox. Among the gifts presented was a transistor radio.

Traffic Jams Unsnarled Here

Analog computer solves traffic density equations and orders phase changes to relieve congestion

The mathematical equation involving phase time and roadway occupancy is solved by an electronic brain located at this West Avenue intersection. The analog computer feeds its answers to timing circuits which adjust the length of the phases for the signal lights, depending on the congestion of the traffic approaching the intersection at the moment. GRS Vehicle Traffic Control Division's Ted Conklin observes Don Degen of our research department as he makes adjustments on the computer. Don is using a telephone handset which connects directly to the laboratory where he talks with Chris Rorres who watches the results of his adjustments on the meters and recorders on the lab intersection monitor.

Peak traffic on West Ave. (taken at 5:07 P.M., well after sundown, fast film). Straight-thru traffic in curb lane cleared out in one phase, left turners will clear about 30 cars at a time during next phase.

WELL KNOWN to every driver is the problem of the increasing complexity of motor vehicle traffic on Rochester streets. Typical is the complicated pattern of automobile and truck movements at the intersection of West Avenue and Buffalo Road about a quarter mile away from our main office, and midway between our two Rochester plants.

This company became involved in motor vehicle traffic control with the introduction of CHEKAR, the Ultra Sonic Vehicle Detector, a few years ago and vehicle traffic control engineering has continued intensively since then.

The new traffic lights and control equipment recently installed on West Avenue are part of an experimental project by GRS and the City of Rochester. It is a fine location for such an experiment, since the daily traffic flow ranges from moderate to extremely heavy, and adjoining intersections complicate movements severely during the rush hours.

The city traffic department has installed new lights with various green arrow combinations, and a direct wire connection has been run to our laboratories. GRS has installed control cases and equipment at the intersection and also in the lab, thereby creating a remote control monitor that indicates Buffalo Road, West Avenue traffic signals in our laboratory.

The motorist approaching the corner sees signal indications which are easy to follow, although somewhat different from others in the city. An observer watching for a few minutes will see four phases, or different combinations. Phase #1, for example, displays three green arrows simultaneously for traffic eastbound on West Avenue. This permits left turn, right turn, or straight through. At the same time southbound traffic on Buffalo Road is permitted to make a right turn onto West Avenue. All other traffic at the intersection is stopped during this phase. These illuminated arrow combinations provide maximum efficiency in moving the traffic and no time is wasted waiting for time sequences involving traffic in lanes which are not in interference.

The most spectacular part of the operation is the traffic congestion measurement and the resulting phase timing changes. Five ultra sonic detector heads have been installed over the approaching traffic lanes. One is on West Avenue, for example, a few hundred yards west of the intersection. It measures the traffic congestion in the center lane (for traffic to turn left into Buffalo Road). As the congestion in that lane builds up, such as at shortly after 4 P.M. and 5 P.M., the time of phase #1 green is lengthened. At maximum congestion, the green time will increase to as much as 50 seconds. During that time approximately 30 cars, in one lane, double that if both lanes are filled, can be cleared.

The instrumentation which automatically adjusts the phase timing is an electronic analog computer. It gathers the information furnished by the sonic detectors and translates it into actual time changes for the traffic signals. Standard traffic control methods could never do as well, because the electronic detectors are looking at traffic and making decisions about cars and trucks which are out of sight, some located a quarter mile away, one, for example, being situated at Buffalo Road and Glide Street.

While the signals are running through their four phases twenty-four hours a day, the indications are being repeated on an illuminated "street diagram" in our research laboratories. The signals on the panel flash red, yellow, green, and arrows show at the same instant as the indication on the street. GRS men in the laboratory study the time factors, observe the metered and graphic reports from the detectors and without visually seeing the street at all, are constantly informed as to the amount of traffic flowing on West Avenue, Buffalo Road, Grover Street, Gardiner Avenue, and in and out of the Ritter Company's parking lot. All of these streets and locations are involved in this traffic problem and all are under constant observance and study from our main office laboratory.

Traffic now flows at maximum efficiency through this ordinarily congested and complicated intersection, thanks to GRS ingenuity.

This research lab installation monitors every light change at the intersection of West Avenue, Buffalo Road, Grover Street, Gardiner Avenue and Ritter parking lot opposite Gardiner. Under the words "Control Center" on the panel may be seen the street diagram with West Ave. represented by the horizontal channel. The opening on the top side simulates Buffalo Rd. The streets opening downward on the panel are, left to right, Grover (opposite Buffalo Rd.) and Gardiner Ave., (opposite Ritter Co. parking lot). The little rectangular objects with 3 or 4 pilot lights (they look like buttons in the picture) represent signal lights suspended at the intersection. These pilot lights are illuminated by the same circuits which control the actual traffic lights over the street, and they are thus synchronized at all times with the street installation. Here Chris Rorres takes readings and checks operations in the laboratory. He is wearing a telephone headset and communicates with Don Degen on the street a quarter mile away.

Amplifiers and other electronic chassis are assembled in Geneseo Plant. These will be used in vehicle traffic control installations for expediting and moving motor traffic on streets, and also in parking areas and garages such as the Mid-Town garage in Rochester. These girls are left to right Kay Fiorentino, Lorraine Minosh, and Lidia Zacharkiw.

GRS FELLOWSHIP CLUB

OFFICERS—One for each office to be elected

PRESIDENT

HAROLD CASTLE, Engr.

WALTER LINK, Relay

FIRST VICE PRESIDENT

EDWARD BOSS, Pat.

AL FERRARO, Pr. Engr.

SECOND VICE PRESIDENT

DORIS FLEISHMAN, Insp.

MARIE HYDE, C.W. (G.P.)

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ROSALIND AGNELLO, Com'l.

MARJORIE GUITSON, Pr. Engr.

RECORDING SECRETARY

MARGARET CONKLIN, Com'l.

ALICE STEWART, Res.

TREASURER

JOHN LANGDON, Com'l.

WILLIAM MATTHEWS, Engr.

BOARD OF DIRECTORS

SIX TO BE ELECTED

FRITZ BERNATZ, Fdy.

WALTER BLUE, Com'l.

RAY DIMURO, Com'l.

DONALD DREXEL, Prod. Cont.

CANDIDATES FOR 1962

This slate of candidates presented by the Fellowship Club nominating committee.

BOARD OF DIRECTORS (Continued)

RAY DURBIN, Bakelite

LORRAINE FLORA, Receiving

ROBERT LEVAN, Drft.

ROBERT LYONS, Cam'l.

RALPH RUMFELT, Engr.

WALTER TRUSIEVITZ, Drills

RALPH WEIDMAN, Tool Stock

ARTHUR YOUNG, Mills

CARRY-OVER DIRECTORS

TWO TO BE ELECTED

MARY AURELI, Reloy

JOSEPH ENGLERT, Cam'l.

CARLTON GOEBEL, Engr.

MARSON HAMMOND, Engr.

WALTER HOGARTH, Bakelite

GAYLE VAN GELDER, Tel. Oper.

ANNUAL CHRISTMAS DINNER DANCE

DECEMBER 9, 1961 AT THE ROCHESTER CLUB

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Dinner — 6:30 - 9:00 p.m. with Dinner Music by Syl Novelli at the Piano.

Dancing — 9:00 - 1:00 to music of Syl Novelli's orchestra.

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WANT ADS

FOR SALE: Chest of Drawers, $8.00. Call Helen Layton, Ext. 231.

FOR SALE: Ping Pong Table — chrome folding legs, two years old, excellent condition, $20.00. Thomas Testa, Transformer Dept., or call FA 8-1350.

FOR SALE: American Flyer Electric Train complete with 2 locomotives, 9 cars, 47 lengths of track and many extras. Bob Cross, Ext. 207 or Spencerport EL 2-6947.

WANTED: A .22 Pistol. Contact Bill Sexstone, Stock Dept.

FOR SALE: RCA Gas Range (Estate) Large oven, 3 years old, ½ price. G. Drewry, GR 3-1041.

FOR SALE: Rug and Pad, 9 x 10, brown with various colors, wool and nylon, excellent condition. $50.00. ID 6-3572.

FOR SALE: 1957 Scott-Atwater motor, 7.5 hp. Bought new and only used twice. Asking $75.00. Mary DeRoller, Advertising, Ext. 391.

FOR SALE: Silver Miniature French Poodle puppies. Pedigree, AKC registered. Ken Chase, No. 3-9621.

FOR SALE: Pair of girl's ice skates, size two. One ceiling light fixture. One motor driven jig-saw. BU 8-6478.